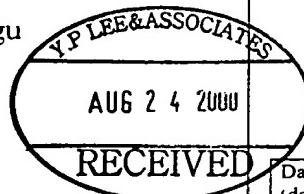


PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LEE Young Pil
The Cheonghwa Bldg.,
1571-18 Seocho-dong, Seocho-gu
Seoul, 137-073
Republic of Korea



PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day month year) 9 August 2000 (09.08.00)

Applicant's or agent's file reference

SH-11357-PCT

IMPORTANT NOTIFICATION

International application No.	International filing date (day month year)	Priority Date (day month year)
PCT/KR 98/00376	24 November 1998 (24.11.98)	25 November 1997 (25.11.97)
Applicant	SAMSUNG ELECTRONICS CO., LTD. et al.	
		RECEIVED

1. The applicant is hereby notified that this International Preliminary Examination Authority transmits herewith the International preliminary examination report and its annexes, if any, established on the international application. **DEC 24 2000**
Technology Center 2600
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/B/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SH-11357-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/KR 98/00376	International filing date (<i>day/month/year</i>) 24 November 1998 (24.11.98)	Priority Date (<i>day/month/year</i>) 25 November 1997 (25.11.97)
International Patent Classification (IPC) or national classification and IPC IPC⁷: H04J 11/00		
Applicant SAMSUNG ELECTRONICS CO., LTD. et al.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examination Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application

Date of submission of the demand 21 June 1999 (21.06.99)	Date of completion of this report 13 April 2000 (13.04.00)
Name and mailing address of the IPEA/AT Austrian Patent Office Kohlmarkt 8-10 A-1014 Vienna Facsimile No. 1/53424/200	Authorized officer Mesa Telephone No. 1/53424/327

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR 98/00376

I. Basis of the report

1. With regard to the elements of the international application:*

the international application as originally filed

the description:

pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

the claims:

pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

the drawings:

pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

the sequence listing part of the description:

pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

the description, pages _____.

the claims, Nos. _____.

the drawings, sheets/fig _____.

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as „originally filed“ and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/KR 98/00376**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims	1-7	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)**Cited documents:**

D1: EP 0 683 576 A1

D2: WO 92/10043 A1

Documents D1 and D2 are considered to be the most relevant state of the art comprising similar features as in the present application. Both documents, D1 and D2, provides methods for adjusting the sampling interval and frequency by using the spectrum of the received pilot signals, differing from the present application in the method of making use of the phase differences or frequency differences.

Therefore, claims 1-7 are new and involve an inventive step.

Industrial applicability is given, too.

INTERNATIONAL PRELIMINARY EXAMINATION REPORTInternational application No.
PCT/KR 98/00376**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Text should be inserted in empty boxes of figures 1 and 2.

It is recommended to insert reference signs in parentheses in the claims to increase their intelligibility. Please use the same reference signs for the same features throughout the description resp. drawing(s).